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From: Erica Gaddis
Sent: Sun 8/9/2015 5:15:24 PM
Subject: Utah - New Mexico coordination of sampling

Allison, Laura, and Patrick,

I am coordinating Utah DWQ's monitoring efforts on the San Juan today and into next week. We have a crew at the state line now and we are trying to determine when the plume will likely enter Utah. Could any of you provide answers to any of these questions? I have also asked EPA but have not received any answers

- * Do we have a velocity estimate of the plume in the San Juan River? The 4mph on the last EPA report appears to be for the Animas but it is unclear.
- * Is it correct that the plume reached Farmington at 9am and Kirtland at 4pm? If so, then the travel time would be approximately 1.4 mph.
- * Do you have any velocity measurements? The USGS gage at four corners reports discharge but I can't find a cross-section or rating curve to back out velocity.
- * Do you have crews out sampling and if so could you share your monitoring locations and sampling strategy?

The Utah stateline is 55 stream miles from Kirtland. Assuming 1.42 mph, the plume will enter Utah at 1:00am tomorrow (Monday) morning. Our crew estimates the velocity of the river to be 2.3 to 2.7 mph at Four Corners. If that estimate is correct the earliest the plume will arrive is 3:00pm this afternoon. Assuming the plume is slower than the river, it is more likely to be this evening. They are going to begin collecting samples at noon and will collect at 3 hour intervals unless we see a visual plume. Any help in estimating the travel time would be much appreciated.

The river is very turbid due to rains and our crew does not think they will be able to visually see the plume when it arrives. They describe the river now as red, turbid, and consistency of a smoothie.

We think it is unlikely that they will be able to visually see the plume when it arrives.

Any information you can share with our agency would be very much appreciated. Our crew collected 4 baseline samples along the San Juan yesterday. Today they are waiting at the stateline and will begin collecting water column samples at noon and will do so at 3 hour intervals unless they have visual confirmation of the plume.

Thanks,
Erica

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